

ABSTRACT OF THE DISCLOSURE

A breakaway interface between radiological information systems, imaging equipment and picture archive and communications systems has automated filtering and handling of multiple study work orders or affiliated work orders, while passing single study work orders through unaltered. The work orders are processed by the breakaway interface to consolidate multiple procedure or multiple study work orders into a single super order, which is then communicated, preferably using DICOM standard protocol, to an imaging machine. The imaging machine returns a single image sequence, and the breakaway interface will then break images away from the single image sequence into a plurality of grouped image sequences. The preferred grouping is based upon anatomical regions, and separate but adjacent anatomical regions will preferably share one or more images at the boundary between the adjacent regions. The exact number of shared images may preferably be preset at the system level. A number of different techniques for analyzing the single image sequence are proposed individually or in combination, including histogram analysis, peak finding techniques, moments of order analysis, evaluating information from one or more previous analyses, and evaluating image sequence series information to distinguish discrete imaging procedures.